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09/972,010	10/05/2001	Duane Mark Baldwin	SJ09-2001-0093	4421

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EXAMINER	
CHOUDHURY, AZIZUL Q	
ART UNIT	**PAPER NUMBER**
2145	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/972,010	BALDWIN ET AL.	
	Examiner	Art Unit	
	Azizul Choudhury	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/25/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

This office action is in response to the correspondence received on March 21, 2005.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Linde (US Pat No: US006606651B1).

1. With regards to claim 1, Linde teaches a storage area network (SAN) having a plurality of components including a first and second digital data processors executing a first and second operating systems, respectively, in communication with one or more storage devices, comprising: a first platform-specific process executing on the first digital data processor, a second platform-specific process executing on the second digital data processor, wherein the second operating system is different from the first operating system, a common platform-independent processes executing on the first and the second digital data processors; and the platform-independent processes effecting execution of the first and second platform-specific processes via command line parameters (Linde teaches a design for a SAN that allows for multiple clients and multiple storage

devices (column 4, lines 35-44, Linde). Devices such as clients and storage devices must process commands and hence each must have processors. In addition, clients and storage devices need file systems and hence each of these elements has operating systems along with processors. Linde's design also sets out to allow clients and storage devices with different operating systems to operate together. Hence, Linde's design allows for different operating systems (column 4, lines 45-50, Linde). When a file "read or write" request is made in Linde's SAN, the client's request is sent out to the storage server and processed by the server and the storage devices. When a file request is made through a network such as Linde's (Figure 1, Linde), the process by which the command is sent out from each of the clients is platform independent as claimed. The file request command process is made through a network (for instance the process follows http or ftp through command line) and hence is network protocol dependent and not platform dependent. However, the file request command process being made from the clients still effect executions on the client machines as claimed as well. So the file request process is platform independent within the claimed design as well as Linde's design. The clients of Linde's design are able to each have different operating systems, the request is not sent out in multiple formats but instead one format. In Linde's design, the file request commands are interpreted (column 3, line 58, Linde) by the server and sent onto the appropriate storage device for processing. Hence, a driver in the server translates the basic

request commands for the storage devices to all understand (column 4, lines 8-17, Linde)).

2. With regards to claim 2, Linde teaches the SAN, wherein each of the platform-specific processes communicates with the platform-independent process via a command line interface of its respective digital data processor operating system (When a file request is made through a network such as Linde's (Figure 1, Linde), the process by which the command is sent out from each of the clients is platform independent as claimed. The file request command process is made through a network (for instance the process follows http or ftp through command line) and hence is network protocol dependent and not platform dependent. So the file request process is platform independent within the claimed design as well as Linde's design).

3. With regards to claim 3, Linde teaches the SAN, wherein each of the first and the second operating systems can be any of a Unix™, a Windows™, Solaris, AIX operating systems (Linde's design allows for any suitable operating system (column 4, lines 45-50, Linde)).

4. With regards to claim 4, Linde teaches the SAN, comprising a manager in communication with the common platform-independent processes to transmit a request thereto for information regarding one or more components of the SAN

(Linde's design features a server (equivalent to the claimed manager) that is able to serve the common platform independent process of file requests by interpreting and send the requests to the appropriate storage devices).

5. With regards to claim 5, Linde teaches the SAN, wherein the common platform independent processes respond to the request from the manager by invoking the first and second platform-specific processes, respectively (Linde's design has a storage server (manager) in between the clients and the storage devices (Figure 1, Linde). When this server (manager) returns the requested data to the client, the receipt of the data by the clients must invoke platform-specific processes as claimed).

6. With regards to claim 6, Linde teaches the SAN, wherein the invoked platform specific processes gather information regarding one or more SAN components and transmit the information to the Standard Output/Error of its respective digital data processor (Anytime data is to be viewed, such as when it is retrieved through a SAN, the information must be transferred through Standard output/error. Linde's design, as all computing designs, allows for I/O. In addition, Linde's design supports various I/O device types (column 4, lines 8-17. Linde)).

7. With regards to claim 7, Linde teaches the SAN, wherein the common platform independent processes capture information in the Standard Output/Error transmitted by he invoked platform specific process (As stated earlier, anytime data is to be viewed, such as when it is retrieved through a SAN, the information must be transferred through Standard output/error. Such data is viewable through platform independent processes (such as web pages). Linde's design, as all computing designs, allows for I/O. In addition, Linde's design supports various I/O device types (column 4, lines 8-17. Linde)).

8. With regards to claim 8, Linde teaches the SAN, wherein the common platform independent processes transmit the captured information to the manager for further processing (If further processing is required, data is transferable to the storage server (manager) through platform independent processes such as command line (ftp and http are performable over command line)).

9. With regards to claim 9, Linde teaches the SAN, wherein the manager comprises a query engine for transmitting the request to the common platform independent processes (Linde's design features a storage server (manager) (Figure 1, Linde). The server processes requests and must locate the correct data storage device and hence inherently must comprise a query engine as claimed).

10. With regards to claim 10, Linde teaches the SAN, wherein the query engine comprises a registry identifying the common platform independent processes and the digital data processors associated therewith (Linde's design features a storage server (manager) (Figure 1, Linde). This server has a query engine as stated above and contains drivers to aid it to identify processes and platforms (column 4, lines 8-17. Linde)).

11. With regards to claim 11, Linde teaches the SAN, wherein the registry provides one or more identifiers for communicating with the common platform independent processes (Linde's design features a storage server (manager) (Figure 1, Linde). This server has a query engine as stated above and contains drivers to aid it to identify processes and platforms (column 4, lines 8-17. Linde). Such drivers contain identifiers).

12. With regards to claim 12, Linde teaches the SAN, wherein the query engine formats the request in a mark-up language format (Linde's design uses a network by which to transmit the requests (Figure 1, Linde). Data transfer in networks commonly occurs in markup languages).

13. With regards to claim 13, Linde teaches the SAN, wherein the mark-up language can be any of XML and HTML (Linde's design uses a network by which to

transmit the requests (Figure 1, Linde). Data transfer in networks commonly occurs in markup languages).

14. With regards to claim 14, Linde teaches the SAN, wherein the platform independent processes format the captured information in a mark-up language format for transmission to the manager (Linde's design uses a network by which to transmit the requests (Figure 1, Linde). Data transfer in networks commonly occurs in markup languages).

15. With regards to claim 15, Linde teaches a storage area network having first and second digital data processors and one or more storage devices in communication with the digital data processors, the improvement comprising: a manager in communication with the SAN components, a first platform-specific process executing on the first digital data processor, the first digital data processor executing under a first operating system, a second platform-specific process executing on the second digital data processor, the second digital data processor executing under a second operating system different from the first platform, common platform-independent processes executing on the first and the second digital data processors and communicating with the first and the second platform-specific processes via one or more command-line parameters; and the managers transmits a query to the common platform-independent processes to request information regarding one or more of the SAN components and the

platform independent processes invoke the first and second platform-specific processes, respectively, to obtain the requested information (Linde teaches a design for a SAN that allows for multiple clients and multiple storage devices (column 4, lines 35-44, Linde). Devices such as clients and storage devices must process commands and hence each must have processors. In addition, clients and storage devices need file systems and hence each of these elements has operating systems along with processors. Linde's design also sets out to allow clients and storage devices with different operating systems to operate together. Hence, Linde's design allows for different operating systems (column 4, lines 45-50, Linde). When a file "read or write" request is made in Linde's SAN, the client's request is sent out to the storage server (equivalent to the claimed manager) and processed by the server and the storage devices. When a file request is made through a network such as Linde's (Figure 1, Linde), the process by which the command is sent out from each of the clients is platform independent as claimed. The file request command process is made through a network (for instance the process follows http or ftp through command line) and hence is network protocol dependent and not platform dependent. However, the file request command process being made from the clients still effect executions on the client machines as claimed as well. So the file request process is platform independent within the claimed design as well as Linde's design. The clients of Linde's design are able to each have different operating systems, the request is not sent out in multiple formats but instead one format. In Linde's design, the file

request commands are interpreted (column 3, line 58, Linde) by the server and sent onto the appropriate storage device for processing. Hence, a driver in the server translates the basic request commands for the storage devices to all understand (column 4, lines 8-17, Linde). Finally, Linde's design features a storage server (manager) (Figure 1, Linde). The server processes requests and must locate the correct data storage device and hence inherently must comprise a query engine as claimed).

16. With regards to claim 16, Linde teaches the SAN, wherein the invoked platform specific process gathers information regarding one or more of the SAN components and transmits the information to a command line interface of its respective digital data processor operating system (When a file request is made through a network such as Linde's (Figure 1, Linde), the process by which the command is sent out from each of the clients is platform independent as claimed. The file request command process is made through a network (for instance the process follows http or ftp through command line) and hence is network protocol dependent and not platform dependent. So the file request process is platform independent within the claimed design as well as Linde's design).

17. With regards to claim 17, Linde teaches the SAN, wherein the common platform independent processes capture the information in a Standard Output/Error transmitted by the invoked platform specific process (As stated earlier, anytime

data is to be viewed, such as when it is retrieved through a SAN, the information must be transferred through Standard output/error. Such data is viewable through platform independent processes (such as web pages). Linde's design, as all computing designs, allows for I/O. In addition, Linde's design supports various I/O device types (column 4, lines 8-17. Linde)).

18. With regards to claim 18, Linde teaches the SAN, wherein the manager comprises a query engine for forwarding the query from the manager to the common platform independent process (Linde's design features a storage server (manager) (Figure 1, Linde). The server processes requests and must locate the correct data storage device and hence inherently must comprise a query engine as claimed).

19. With regards to claim 19, Linde teaches the SAN, wherein the query engine comprises a registry containing information for identifying the common platform independent process and its respective digital data processors (Linde's design features a storage server (manager) (Figure 1, Linde). This server has a query engine as stated above and contains drivers to aid it to identify processes and platforms (column 4, lines 8-17. Linde)).

20. With regards to claim 20, Linde teaches the SAN, wherein the common platform independent process registers with the registry to provide identification

information thereto (Linde's design features a storage server (manager) (Figure 1, Linde). This server has a query engine as stated above and contains drivers to aid it to identify processes and platforms (column 4, lines 8-17. Linde). Such drivers contain identifiers).

21. With regards to claim 21, Linde teaches a computer readable media including code executed by a first and second digital data processors having first and second operating systems in communication with one or more storage devices, wherein the code comprises: a first platform-specific process executing on the first digital data processor; a second platform-specific process executing on the second digital data processor, wherein the second operating system is different from the first operating system; common platform-independent processes executing on the first and the second digital data processors, wherein the platform-independent processes effecting execution of the first and second platform-specific processes via command line parameters (Linde teaches a design for a SAN that allows for multiple clients and multiple storage devices (column 4, lines 35-44, Linde). Devices such as clients and storage devices must process commands and hence each must have processors. In addition, clients and storage devices need file systems and hence each of these elements has operating systems along with processors. Linde's design also sets out to allow clients and storage devices with different operating systems to operate together. Hence, Linde's design allows for different operating systems (column

4, lines 45-50, Linde). When a file "read or write" request is made in Linde's SAN, the client's request is sent out to the storage server and processed by the server and the storage devices. When a file request is made through a network such as Linde's (Figure 1, Linde), the process by which the command is sent out from each of the clients is platform independent as claimed. The file request command process is made through a network (for instance the process follows http or ftp through command line) and hence is network protocol dependent and not platform dependent. However, the file request command process being made from the clients still effect executions on the client machines as claimed as well. So the file request process is platform independent within the claimed design as well as Linde's design. The clients of Linde's design are able to each have different operating systems, the request is not sent out in multiple formats but instead one format. In Linde's design, the file request commands are interpreted (column 3, line 58, Linde) by the server and sent onto the appropriate storage device for processing. Hence, a driver in the server translates the basic request commands for the storage devices to all understand (column 4, lines 8-17, Linde)).

22. With regards to claim 22, Linde teaches the computer readable medium wherein each of the platform-specific process communicates with the platform-independent process via a command line interface of its respective digital data processor operating system (When a file request is made through a network such

as Linde's (Figure 1, Linde), the process by which the command is sent out from each of the clients is platform independent as claimed. The file request command process is made through a network (for instance the process follows http or ftp through command line) and hence is network protocol dependent and not platform dependent. So the file request process is platform independent within the claimed design as well as Linde's design).

23. With regards to claim 23, Linde teaches the computer readable media further comprising: a manager in communication with the common platform-independent processes to transmit a request thereto for information regarding one or more components of the SAN (Linde's design features a server (equivalent to the claimed manager) that is able to serve the common platform independent process of file requests by interpreting and send the requests to the appropriate storage devices).

24. With regards to claim 24, Linde teaches the computer readable media wherein the common platform independent processes respond to the request from the manager by invoking the first and second platform-specific processes, respectively (Linde's design has a storage server (manager) in between the clients and the storage devices (Figure 1, Linde). When this server (manager) returns the requested data to the client, the receipt of the data by the clients must invoke platform-specific processes as claimed).

25. With regards to claim 25, Linde teaches the computer readable media wherein the invoked platform specific processes gather information regarding one or more SAN components and transmit the information to the Standard Output/Error of its respective digital data processor (Anytime data is to be viewed, such as when it is retrieved through a SAN, the information must be transferred through Standard output/error. Linde's design, as all computing designs, allows for I/O. In addition, Linde's design supports various I/O device types (column 4, lines 8-17. Linde)).

26. With regards to claim 26, Linde teaches the computer readable media wherein the manager comprises a query engine for transmitting the request to the common platform independent processes (Linde's design features a storage server (manager) (Figure 1, Linde). The server processes requests and must locate the correct data storage device and hence inherently must comprise a query engine as claimed).

Response to Remarks

After careful evaluation of the correspondence received on March 21, 2005, the amended claims, new claims and remarks are not deemed fully persuasive. While the claim amendments do succeed in clarifying the details of the claimed invention, they continue to claim the invention initially claimed and reject by the first office action. The

new claims are simply slightly revised versions of some of the amended claims. Hence, they too continue to be rejected by the Linde prior art.

Within the remarks, the applicant's representatives address their concerns regarding the use of platform independent processes executing on first and second processors through command line parameters. It is inherent that computing devices maintain command line functionality. It is further inherent that within networked computing devices, processes and requests are transferred/communicated between devices through command lines. This is simply not seen by users to minimize the complexity of the processes viewed by the users.

As for the concern regarding the use of different operating systems within different processors of the claimed design, this feature is clearly addressed within the Linde disclosure when Linde states that any operating system and device driver are applicable to the design. It is very well known in the art that machines with different operating systems are able to network together and transmit data between one another.

The examiner has made a considerable effort to provide explanations behind the motivation for rejection within the first office action. Many of the claimed traits continue to be either inherent traits or well-known traits. Due to such claimed traits, the examiner's rejection must continue to stand.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER